Past Projects

Sensor Nodes for
Nuclear Nonproliferation
Energy Harvesting for
Wireless Sensing,
Sensory Substitution,
Multi-rotor Damage Detection,
Drill Vibration Reduction,
Laser Ultrasonics for
Non Destructive Evaluation

Tutorial Examples

Modeling Dynamics Systems
Signal Processing
System Identification
Controls
Embedded Systems
Machine Learning
Nonlinear Systems
Model Verification and Validation

Past Guest Lectures

Thinking Telescopes
Fiber Optic Sensing
Nuclear Safeguards
Computer Vision
Wireless Energy Delivery
Electric Grid Modeling
Smart Materials

2015 LADSS Students

Los Alamos Dynamics Summer School
June 6 - August 5, 2016*
** Program accommodates late arrivals by students on quarter systems*

About Los Alamos, New Mexico:

Los Alamos sits at an elevation of about 7,500 feet with a temperate mountain climate lending itself to a multitude of outdoor activities including rock climbing, hiking, camping and rafting. The population is roughly 18,000 and booms each summer with the influx of almost 1000 students coming to experience a LANL internship. Just half an hour from Santa Fe, a city known for it's arts, entertainment, and Southwestern Culture, Los Alamos offers a beautiful setting for conducting exceptional scientific and engineering research.

E-mail: LADSSInfo@lanl.gov
Los Alamos National Laboratory
Los Alamos, NM
http://ladss.lanl.gov
Submit applications to: LADSSApply@lanl.gov

Los Alamos
NATIONAL LABORATORY
EST. 1943

LA-UR-15-28246

Engineering Institute

LANL • UCSD

EI

The 17th Annual
Los Alamos Dynamics Summer School

The 17th Los Alamos Dynamics Summer School

June 6 - August 5, 2016

Purpose:
The Los Alamos Dynamics Summer School seeks to focus a select group of upper-level undergraduates and first-year graduate students on developing multi-disciplinary dynamic engineering system solutions to Los Alamos National Lab (LANL) mission relevant problems.

Students:
Our program is designed for upper level undergraduate students or first-year graduate students. The selection committee seeks to identify high quality students from diverse academic and cultural backgrounds.

Acceptance into the program is based primarily on academic record and letters of recommendation. As a general guideline, applicants should have sufficient academic achievement that they are, or will be, eligible for graduate school. A variety of academic disciplines are being sought, including aerospace, civil, mechanical, electrical and nuclear engineering, computer science, and mathematics/statistics.

In lieu of salaries, the students will be provided with a fellowship intended to also cover travel and housing expenses. Fellowship amounts range from $7000 to $10,500, depending on academic status and the point of origin for the student's travel to Los Alamos.

This program is limited to US citizens.

Focus areas: The multi-disciplinary nature of research related to dynamics engineering systems will be emphasized throughout the summer school through research projects, tutorials and guest lectures. Students will be assigned to teams guided by a Los Alamos Lab mentor and work on a research topic with analytical and experimental components.

Projects: Students are placed into 3-person, multi-disciplinary teams and assigned a research activity to be completed in an intense 9 week time frame. The goal is for the students to document and present their results at the IMAC conference.

Tutorials: Attend week-long tutorials (1.5 hrs/day) on various aspects of dynamics systems engineering. Students will apply tutorial concepts as they design, build, and test systems to address their project's research goals.

Guest Lectures: Twice a week students attend guest lectures that discuss current dynamics systems engineering research. This research is typical of projects worked on by graduate students.

Tours: Students visit unique LANL research facilities including Dual Axis Radiographic Hydrodynamic Test Facility, Los Alamos Neutron Science Center, and the Metropolis High Performance Computing Center.

Hybrid Structural Health Monitoring Team

How to Apply

http://ladss.lanl.gov
LADSSApply@lanl.gov

How to Apply:
Download an application form from the website above and email it, with the following documents, to LADSSApply@lanl.gov.

1. 1-page cover letter describing their interest in this summer school and multi-disciplinary dynamic systems research as well as your near term (1-3 year) academic and professional goals
2. Resume
3. Complete Transcripts (Unofficial is acceptable. Please mark through/black out any personal identifying information such as address, SSN, DOB, etc.)
4. At least one letter of recommendation

Applications must be received by January 10, 2016.

Acceptance notifications will be sent by January 22, 2016.

Questions?

Please contact LADSSInfo@lanl.gov
Chuck Farrar at farrar@lanl.gov
Eric Flynn at eflynn@lanl.gov or
David Mascarenas at dmascarenas@lanl.gov

E-mail: LADSSInfo@lanl.gov
http://ladss.lanl.gov